

PARAMETER TITLE: D-Value for Encapsulated Bioburden (D_{B125})

VALUE	
UPPER	5.0 hr.
ACCEPTABLE	5.0 hr.
LOWER	5.0 hr.

APPLICATION	
MISSION	All
CATEGORY	IV
PLANET	All

PARAMETER DEFINITION: Time required to destroy 90% of the microbial spore population encapsulated in non-metallic spacecraft material subjected to sterilizing dry heat at a temperature of 125°C.

APPLICABLE SOURCE: All spore populations buried within non-metallic spacecraft materials.

CONSTRAINTS: Specified D-value can be applied where sterilization cycle conditions stated in NPG 8020.12B have been met. Thermal response of materials must be considered in design of sterilization cycles. Project must specify method for the measurement of these parameters and make allowances for stabilization times.

REFERENCES: 1. Recommendations of PQAP Subcommittee 1A Resulting from Deliberations on July 25-26, 1968.

Planetary Protection Officer

Date